

Nu-Life System 500 & Original Lath

LEADERPRUFE

Waterproofing
Membranes

FEATURES

Damp-proof system
for walls



Provides key for plaster,
render or dab fix



Fast-tack application



Controls damp; salts and
contaminated surfaces



Air gap improves
insulation



Easy to use, easy to
handle, just drill and fix



The Sealed System

In Soil retaining situations such as basements and vaults etc, the **NuLife** sealed system is recommended. The membrane selection depends on the required finish and flow rate, if applicable. All membrane junctions, fixing points, service entries and other protrusions are sealed with the **NuLife** Seal range of sealing products. Where active ground water is evident or expected, drainage of one form or another should be incorporated into the specification. Our Technical staff are available to give advice in this respect.

The Ventilated System

In above ground situations or in areas where no free running water is expected, for example where external pavements have been built up, the ventilated system can be used. The ventilated system with air gap at top and bottom does not require sealed joints or fixings, a 100mm overlap is sufficient in this

situation. This method is seen as a sympathetic solution in Heritage type properties as a general damp proofing system. The fabric of the building remains unchanged but the new internal surfaces are 'dry' and are salt and contamination free. Both dry lining or plaster direct finishes are available on the ventilated system.

Floors

As well as being a complete waterproofing and damp proofing, **NuLife** system is also used to upgrade damp and defective floors. With excellent crush resistance, the system lends itself to a variety of different finishes which include conventional screeds, thin layer fast-drying screeds and wood based floating floors. Insulation can also be used in conjunction with the system where required. The system can be linked to the D.P.C. constructed within a new wall or to an existing or chemical D.P.C.

Preparation

As the membrane systems are mechanically fixed, there is no reliance on the ability of the product to bond to the substrate. The **NuLife** system can be applied to a variety of different substrates, for example over existing renders or broken down bitumen coatings, etc.

This can be easily achieved without detriment to the integrity of the system.

Damp Pressure Equalisation

The studded structure of the membrane allows the dampness behind the membrane to move in all directions unhindered, therefore the whole of the wall or floor surface takes the damp loading. Break down created by weak



points are eliminated. The product does not divert the problem to other areas.

Flexibility

In structures where movement or vibration can be a problem, examples being under street vaults, railway arches, and buildings constructed with movement joints, the **NuLife** system can cope. The **NuLife** membrane has an elongation break of greater than 50%.

Speed

As there is little or no preparation required, the system is by comparison quick to install. When dry finishes are used the system is a 'fast track' solution.



Decoration does not need to be delayed as there is no drying process. The Alderprufe brand has a track record approaching three decades. The **NuLife** systems have been used successfully in many situations in the U.K. From small domestic basements up to major waterproofing of London Underground stations, there is rarely a dampness or water ingress problem that falls outside the scope of the capabilities of the **NuLife** system.

What are NuLife Systems

With the introduction of the latest British Standard 8102 (1990) 'for Protection of structures against water from the ground', the use of cavity membranes has been generally accepted in the U.K. **NuLife** Systems are a complete range of products which are used together



to solve many of today's problems in both new and old construction. **NuLife** Systems can easily deal with aggressive ground water conditions, where basements are liable to flooding, or indeed where simple



dampness, contamination or salting problems are prevalent. Other more diverse applications include Turf covered roofs, barn conversions, tunnel linings or even as a barrier against radon gas.

The main components of the system are the membranes themselves. These are manufactured from virgin high density polyethylene which is thermally and alkaline stabilised. The stud heights vary between 8mm for **NuLife 500** and Original Lath to 20mm for **NuLife MS20**. The cavity created by the membrane contains between 5 and 10 Litres of space respectively. This is known as either the 'Air gap' or the 'Drained Cavity', in wet situations.

The Membranes

NuLife 500

(Known as 'System 500'). This membrane is used on both wall and floors with an 'Air gap' of 5.3 Litres of space per m². Available in 2.4m x 20m (48m²), this

membrane is used for light water ingress situations. This membrane is also available in a clear version/ 2m x 20m (40m²) for walls. This aids the selection of good fixing points in the more difficult application i.e. Random stone and friable brickwork. The sealed **NuLife** fixing is used to secure System 500. The centre shank of this fixing is also used for subsequent dry lining applications.

ORIGINAL LATH

This membrane has a mesh incorporated on the internal face which is attached by a thermic welding process at the time of manufacture. The sealed **NuLife** fixing plug is used to secure the membrane at 250mm horizontal and vertical centres. The welded



mesh and fixing plugs allow for direct render 1.1.6.

(cement/lime/sand) or plasters:

Tilcon Whitewall, Carlite

Bonding, or dab fixed plaster-

board for internal applications.

When this grade is used for

external above ground protection,

S.R.P. plain or decorative renders

can be used as a finish. These

renders are polymer modified

and also have reinforcing fibres

incorporated for added strength

and durability. This grade is

available in 1.5m x 10m (15m²)

rolls.

NuLife MS 20

This is a heavy gauge version of

System 500 with deep 20mm

studs. This is used where extra

drainage capacity is required, for

example on deeper structures, or

where a larger flow rate is

required. MS 20 can also be used

as a 'cavity former' for many

types of new construction. The

rolls are a full 2 metre width by

20 metres in length (40m²).



External Protection

Aquadrain

Structures that are earth retaining

can be damaged by moisture

penetration from the outside or

by water under hydrostatic

pressure. **AquaDrain**

Membranes are available as

geocomposites to deal with such

problems. They act as a water-

proof drainage layer, and quickly

remove the water to suitable

drainage around the structure.

They prevent the build-up of

hydrostatic pressure on the

structure and filter the water via

an integral polypropylene filter

layer. This prevents the fine

ground particles from

blocking the drainage facility and

avoids destabilising the soil.

Guarantee

NuLife membrane systems come

with a thirty year guarantee. The

guarantee covers the membrane

and all other system components.

Based on experience, accelerated

ageing tests and a quality

manufacturing system to ISO

9001, the **NuLife** range can also

be guaranteed with confidence.

Staff are available to visit site to

give advice on particularly

difficult or in unusual situations,

where appropriate specifications

are prepared to assist in the

correct use of the system. We

believe our technical staff to be

second to none and certainly the

most experienced in the U.K.

Market. This service is open to

Property owners, Architects,

Surveyors and specialist

companies.

Who Installs NuLife Systems

Although **NuLife** systems are by

comparison, easy to install, it

must be recognised that correct

diagnosis of the problem is

essential so that **NuLife** systems

can be designed and tailored to

the needs of the building, to give



the best possible performance. It

is therefore recommended that

only competent specialist

contractors who understand

dampness and the associated

problems be employed to

survey the site or install the

system and thereby ensure the

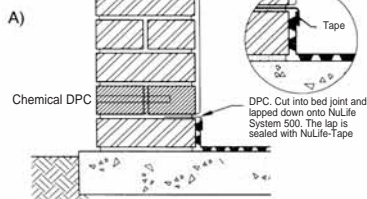
best possible performance of the

NuLife system.



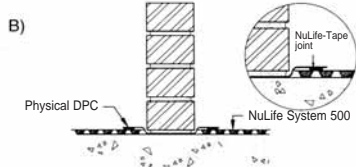
NuLife System 500 Existing Solid Wall Detail

NuLife System 500 floor application sealed at DPC level. The DPC can be a chemical DPC (as shown) or a physical DPC can be cut in and sealed to NuLife System 500



New Internal Solid Wall Detail

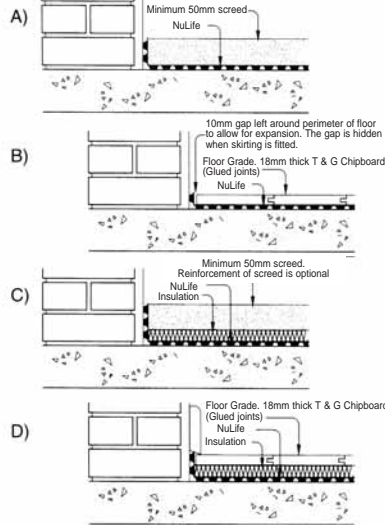
Providing continuous membrane across floor under new dividing walls.



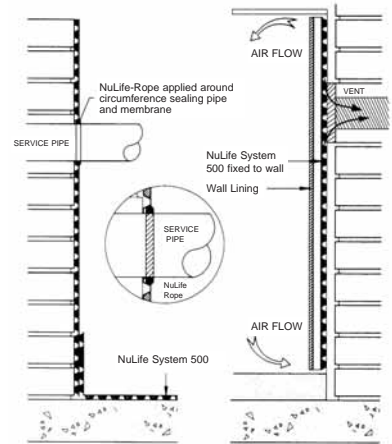
A continuation of the floor membrane can be achieved by extending the physical DPC. Beyond the new wall to overlap onto NuLife System 500. This is then sealed with NuLife-Tape.

NuLife System 500 Typical Floor Finishes

The following options apply to the 8mm or 20mm stud design



NuLife System 500

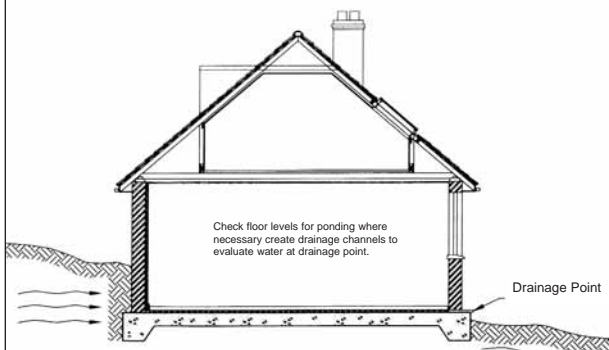


Detail around service pipe

Ventilated system

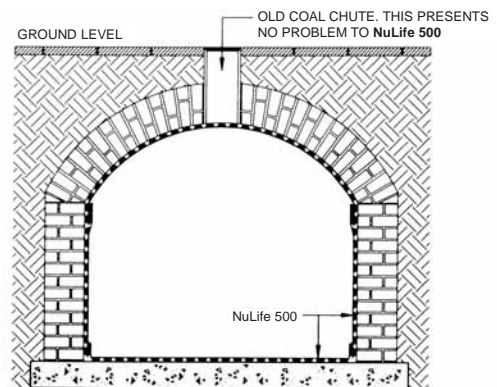
* As an option, the damp pressure can also be released externally via an air vent

NuLife System 500



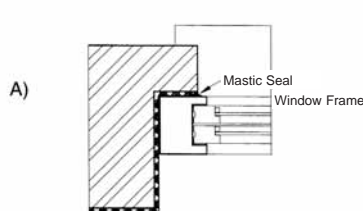
NuLife System 500 can be installed to the earth retaining elevations and floor of the property. This allows the water to be controlled behind the system, bypassing the property and carrying on down the natural incline of the hill. The internal surfaces remain dry.

EARTH RETAINING VAULT

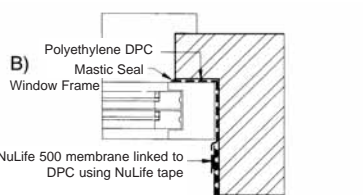


Vaults can be completely sealed against water ingress. Even running water problems can be controlled with minor modifications to the specification. The system can be dry lined to a decorative finish. The floor can be screeded or finished into wood based sheets. Where a plastered finish is required, NuLife PT can be used. (Please refer to our technical department.)

NuLife System 500



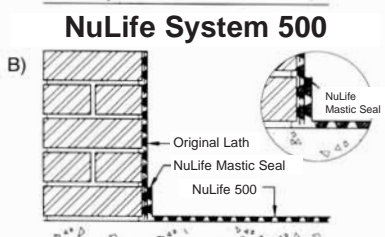
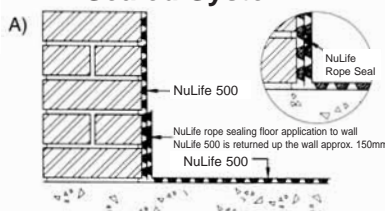
NuLife System 500



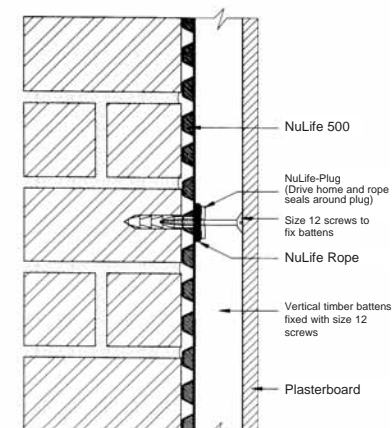
When Original Lath is used in this situation the DPC should continue behind the membrane and can be sealed with NuLife Mastic or rope.

Window Reveal Details

Wall/Floor details on Sealed System



NuLife 500 incorporating Original Lath on the walls



Section showing fixing detail

Pre-treated battens can be fixed into NuLife-Plugs using size 12 screws. The Drill bit size for this plug is 11mm

The fast-track dampproof system guaranteed for 30 years

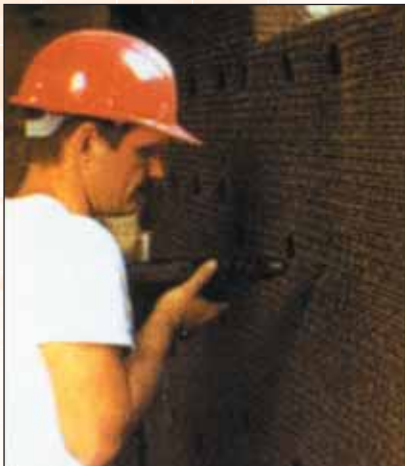
The 'Original' damp-proof plastic membrane systems which eliminates dampness, the effects of salts and contaminated backgrounds. Guaranteed for 30 years. The surface of the membrane has a meshed key permanently manufactured to it, which provides a key for render,

plaster, or dab fixing plaster-board. The dimpled design creates an air gap, which insulates and allows for ventilation, and natural drying of the wall, while providing a dry decorative finish internally. The air gap can be vented externally via an air vent or internally using

the PT-profile strips at the top and bottom of the system.



Roll Size: 1.5m x 10m (15m²)



Fixing

Fixing is by the special polypropylene Original-Lath plug at 250mm centres. An area 100mm free of mesh on the Original-Lath allows firm and positive overlap jointing.



Dry Lining

Dry lining can be fixed to Original-Lath by applying plaster dabs directly onto Original-Lath fixings. (See manufacturer's instructions for full guide)

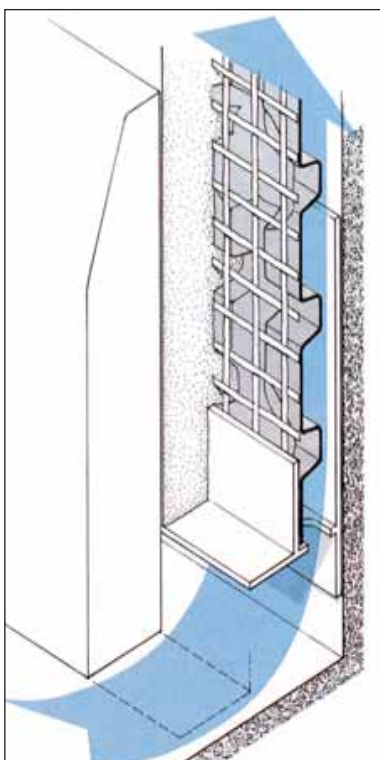
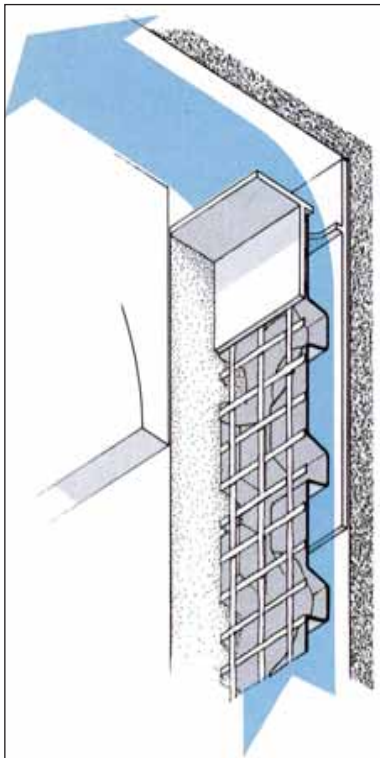


Rendering

Original-Lath will accept traditional renders and plaster. All applications are applied in two coats. (See fixing instructions for full guide)

Key Features

- Damp-proof system for walls
- Provides key for plaster, render or dab fix
- Fast-tack application
- Controls damp; salts and contaminated surfaces
- Air gap improves insulation
- East to use, easy to handle, just drill and fix



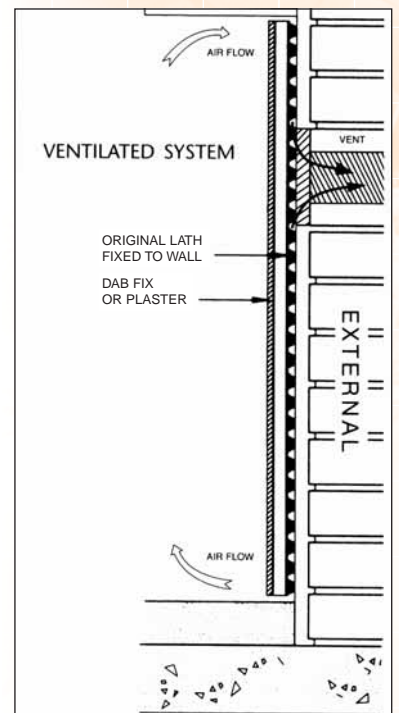
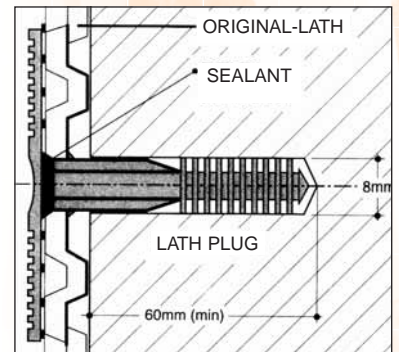
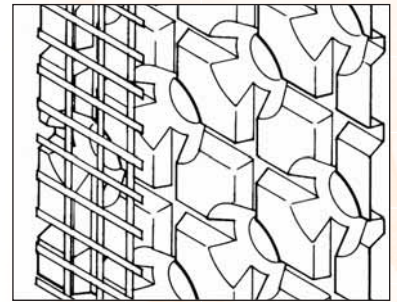
Technical Data

SIZE	supplied in rolls 1.5m x 10m (15m ²)
WEIGHT	8.5kg per roll
DEPTH	< 8mm
RESISTANCE TO COMPRESSION	80kN/m ²
TENSILE STRENGTH	600N/60mm
ELASTICITY	60% (approx)
TEMPERATURE RESISTANCE	Thermal resistance for 105mm outer leaf at 2.7% v/V moisture content is: $0.105 = 0.072\text{mm}^2\text{K/W}$ 1.485
STANDARD U-VALUES	Original-Lath+ plaster+105mm brick wall 2.25W/m ² K Original-Lath+ Plaster+220mm brick wall 1.72W/m ² K
HEALTH & SAFETY	No health hazard

Specification guide

JOINTING	Original-Lath to be lap jointed either horizontally or vertically allowing 100mm overlap.
FIXING	At 250mm internally and 150mm externally (maximum) Vertical and horizontal centres by Original-Lath Plugs, following manufacturer's instructions.
PLASTERING*	In accordance with BS5492
RENDERING*	In accordance with BS5262
DECORATION	Renderings to be thoroughly dry before Painting or application of wallpapers etc.

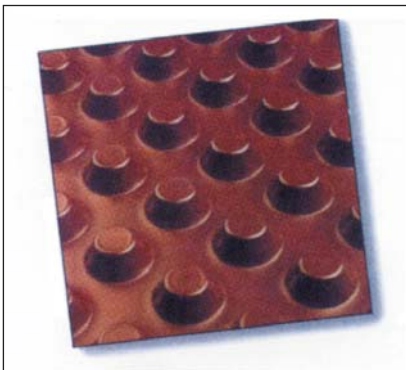
* Refer to manufacturer's instructions for specific plasters and renders.



Guarantee

Original-Lath is guaranteed against deterioration for a period of 30 years on condition that it has been fixed and finished in accordance with the manufacturer's instructions. Alderburgh Limited cannot be held responsible for the performance of plasters, renders or other finishes.

NULIFE 500



Cavity drainage membrane for use on floors, as a waterproof system. A choice of finishes are available. Can also be used externally for waterproof protection of sub-ground structures.

Material:	high density polyethylene
Thickness:	approx. 0.6 mm
Stud height:	approx. 8 mm
Roll size: (With flat edge of 7 cm on one side)	3.0 x 20 m 2.4 x 20 m 2.0 x 20 m (500 clear)
Compressive strength:	> 250 kN/m ²
Drainage capacity:	approx. 2.25 l/s • m approx. 135 l/min • m approx. 8 100 l/h • m
Air volume between studs:	approx. 5.3 l/m ²
Temperature resistance:	- 30°C to + 80°C
Chemical properties:	resistant to chemicals, resistant to root penetration, rotproof, neutral towards drinking water
Behaviour in fire:	B2 accord, to DIN 4102, in the case of special requirements possibly B1 accord. to DIN 4102 (test mark PA III 2.2087)

NULIFE MS 20



Dimpled sheeting with particularly high drainage capacity and compressive strength, suitable for high performance seepage layers in building and civil engineering construction.

Material:	high density polyethylene
Thickness:	approx. 1 mm
Stud height:	approx. 20 mm
Roll size:	2.0 x 20 m In the case of special requirements, also available in board format approx.
Compressive strength:	150 kN/m ²
Drainage capacity:	approx. 10 l/s • m approx. 600 l/min • m approx. 36 100 l/h • m
Air volume between studs:	approx. 14 l/m ²
Temperature resistance:	- 30°C to + 80°C
Chemical properties:	resistant to chemicals, resistant to root penetration, rotproof, neutral towards drinking water
Behaviour in fire:	B2 accord, to DIN 4102, in the case of special requirements possibly B1 accord, to DIN 4102

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